

November 15, 2017

# Actuarial Valuation Report

The City of Newport, Rhode Island

Police Pension System as of July 1, 2017





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This report presents the results of our actuarial valuation of the City of Newport, Rhode Island Police Pension System (the Plan) as of July 1, 2017.

The valuation includes a general discussion and comments on the various schedules included in the report. These schedules summarize the underlying calculations, asset information, participant data, plan benefits and actuarial assumptions, and should be considered an integral part of the valuation.

### **Purpose**

The main purposes of this report are to provide to the City of Newport (the City):

- The pension contribution under the City's funding policy for the 2018-2019 plan year and
- The financial condition of the Plan.

Effective July 1, 2014, the Governmental Accounting Standards Board (GASB) replaced GASB Statement No. 25 with GASB No. 67, and effective July 1, 2015, GASB replaced Statement No. 27 with GASB No. 68. In response to the GASB No. 67 and GASB No. 68 requirements, Korn Ferry Hay Group delivered to the City under separate cover a set of exhibits dated September 29, 2017. Although GASB No. 25 and GASB No. 27 are no longer applicable, we continue to provide GASB Nos. 25 and 27 information in Schedules B and C herein FOR INFORMATION PURPOSES ONLY.

### **Certification**

To the best of our knowledge, this report is complete and accurate and all costs and liabilities have been determined in conformance with generally accepted actuarial principles and on the basis of actuarial assumptions and methods which are reasonable (taking into account past experience under the Plan and reasonable expectations) and which in combination represent our best estimate of anticipated experience under the Plan.

The actuaries certifying to this valuation are members of the Society of Actuaries or other professional actuarial organizations, and meet the General Qualification Standards of the American Academy of Actuaries for purposes of issuing Prescribed Statements of Actuarial Opinion.

Respectfully submitted,

Korn Ferry Hay Group, Inc.

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## Comments on the Valuation

This is Korn Ferry Hay Group's sixth valuation of the Plan. This report includes results for prior years based on methods and assumptions developed by the prior actuary.

### Plan Contribution

The Valuation Highlights exhibit shows the development of the Plan's contribution for the 2018-2019 fiscal year, developed in accordance with the City's funding policy. The total contribution is \$4,647,573. This total cost has increased from \$4,396,285, which was developed for the 2017-2018 fiscal year. The main reason for the increase was recognition of prior asset losses as a result of the asset smoothing method.

If the City wishes to pay the contribution on a monthly basis, beginning on July 31, the monthly payment would be \$374,994.

### Funding Policy

The funding requirement is the sum of two components, an annual normal cost and an amortization payment which will change from year to year in response to evolving plan experience. It is our understanding that beginning with the July 1, 2002 valuation, the amortization period was reduced from 30 to 29 years, and that for each year the amortization period decreases by one year. Thus, the amortization period for the July 1, 2017 valuation is 14 years. The normal cost and amortization is then offset by anticipated employee contributions to the Plan, to arrive at the net City contribution.

### Plan Assets

Schedule A contains information about the Plan's assets. As of June 30, 2017, the market value of the Plan's assets is \$66,016,785 and the actuarial value of plan assets is \$66,419,271. The overall rate of return achieved for the 2016-2017 plan year was 13.5 percent on a market value basis.

The asset information used for the valuation was provided by the City. We have not audited such information, but have checked it for reasonableness and consistency.

### Funding Status

Schedule B provides the information on pension plans formerly required by GASB Statement No. 25 FOR INFORMATION PURPOSES ONLY.

Schedule C provides the information on pension plans formerly required by GASB Statement No. 27 FOR INFORMATION PURPOSES ONLY.

Schedule D discloses estimated City contributions and Plan benefits over the next twenty years. The Plan emerged from "critical status" (i.e., achieved a market value funding ratio of greater than 60%) on June 30, 2014 but dropped to 59.8% funded on June 30, 2016 as a result of both the interest rate reduction and asset losses. The Plan again emerged from "critical status" on June 30, 2017 with a 64.5% funded percentage.

### Participant Data

Schedule E provides a distribution of the active participants as of July 1, 2017 by age and length of service. It also shows the average salary by age and service brackets. Schedule E also includes a breakdown of the inactive participants, by age and benefit amounts.



Although we have made tests to check for the reasonableness and consistency of the participant data, we have not audited the data but have relied on it as submitted by the City.

### **Actuarial Assumptions and Methods**

Schedule F summarizes the actuarial assumptions and cost methods used for the valuation. Effective with this July 1, 2017 valuation, we adjusted the retirement assumptions to increase the probability of retirement at two service points (upon the attainment of 25 years of service and 30 years of service) and lowered the withdrawal assumptions at all service levels under 10 years of service. Otherwise, there were no changes to the actuarial assumptions or cost methods since the prior valuation.

### **Plan Provisions**

Schedule G contains a summary of the principal provisions of the plan in effect as of July 1, 2017.



## Valuation Highlights

	<u>July 1, 2016</u>	<u>July 1, 2017</u>
<b>A. Membership Data</b>		
1. Active Members		
a. Number	71	64
b. Expected covered payroll for fiscal year beginning on the valuation date	\$ 5,351,641	5,003,059
c. Average pay	\$ 75,375	68,670
d. Average age	41.1	40.7
e. Average service	14.2	13.7
2. Retired members and beneficiaries		
a. Number	125	131
b. Aggregate annual pension	\$ 5,347,891	5,802,387
c. Average annual pension	\$ 42,783	44,293
d. Average age	66.9	66.9
3. Deferred vested members		
a. Number	1	1
b. Aggregate annual pension	\$ 36,000	36,000
c. Average annual pension	\$ 36,000	36,000
d. Average age	50.0	51.0
<b>B. Basic Valuation Results</b>		
1. Normal cost <sup>1</sup>	\$ 1,419,028 (26.5%)	1,384,448 (27.7%)
2. Actuarial accrued liability		
a. Active members	\$ 24,063,959	21,862,812
b. Retirees and beneficiaries	73,381,733	80,026,531
c. Deferred vested	494,396	531,089
d. Total	\$ 97,940,088	102,420,432
3. Valuation assets	\$ 62,994,728	66,419,271
4. Unfunded actuarial accrued liability	\$ 34,945,360	36,001,161
	<b><u>July 1, 2017 to June 30, 2018</u></b>	<b><u>July 1, 2018 to June 30, 2019</u></b>
<b>C. Development of Contribution</b>		
1. Contribution for fiscal year of valuation		
a. Normal cost with interest	\$ 1,575,174	1,525,653
b. Amortization of unfunded actuarial accrued liability	3,280,009 <sup>2</sup>	3,547,818 <sup>3</sup>
c. Anticipated employee contributions with interest	(458,898)	(425,899)
d. City contribution assumed deposited June 30	\$ 4,396,285	4,647,573
2. Monthly City contribution beginning July 31	\$ 354,719	374,994

<sup>1</sup> Percentages in parentheses represent amounts as percentages of covered payroll.

<sup>2</sup> Amortized over 15 years from the valuation date as a level percentage of payroll.

<sup>3</sup> Amortized over 14 years from the valuation date as a level percentage of payroll.



## Schedule A: Analysis of Plan Assets

Schedule A.1 Schedule of Receipts and Disbursements		
<b>1. Market Value at July 1, 2016</b>	<b>\$</b>	<b>58,564,802</b>
2. Receipts		
a. City Contributions	\$	4,314,776
b. Member Contributions		418,174
c. Net Investment Income		8,168,366
d. Total Receipts	\$	12,901,316
3. Disbursements		
a. Benefit Payments	\$	5,449,333
b. Total Disbursements	\$	5,449,333
<b>4. Market Value at June 30, 2017 (1. + 2. - 3.)</b>	<b>\$</b>	<b>66,016,785</b>

Schedule A.2 Trust Investment Yield for 12 Months Ending June 30, 2017		
1. Asset Market Value at July 1, 2016	\$	58,564,802
2. City Contributions during the year (paid 7/1/16)		4,314,776
3. Member Contributions and Benefits paid during the year		(5,031,159)
4. Asset Market Value at June 30, 2017		66,016,785
5. Investment Increment		8,168,366
6. Approximate Average Asset Market Value (1. + 2. + [ 3. * 0.5 ])	\$	60,363,999
7. Approximate Yield Rate (5. / 6.)		13.5%



**Schedule A.3**  
**Actuarial Value of Assets as of June 30, 2017**

<b>1. Development of June 30, 2017 Expected Actuarial Value of Assets:</b>	
(a) Actuarial value of assets July 1, 2016	\$ 62,994,728
(b) Contributions for the 2016-17 plan year	
(1) Employee Contribution	418,174
(2) Employer Contributions	4,314,776
(c) Benefit payments and expenses for the 2016-17 plan year	5,625,394
(d) Interest on (a), (b) and (c) at 7.25 percent (a + b2) x 7.25% + ((b1 - c) x (1.0725 <sup>0.5</sup> - 1))	4,694,480
(e) Expected actuarial value of assets June 30, 2017 (a) + (b) - (c) + (d)	\$ 66,796,764
<b>2. Development of Amount of Difference to be Amortized</b>	
(a) Difference between expected actuarial value and market value as of June 30, 2013	\$ 0
(b) Unrecognized amount of June 30, 2013 difference: 20 percent of (2a)	0
(c) Difference between expected actuarial value and market value as of June 30, 2014	0
(d) Unrecognized amount of June 30, 2014 difference: 40 percent of (2c)	0
(e) Difference between expected actuarial value and market value as of June 30, 2015	0
(f) Unrecognized amount of June 30, 2015 difference: 60 percent of (2e)	0
(g) Difference between expected actuarial value and market value as of June 30, 2016	(5,537,408)
(h) Unrecognized amount of June 30, 2016 difference: 80 percent of (2g)	(4,429,926)
(i) Market value as of June 30, 2017	66,016,785
(j) Difference between expected actuarial value and market value as of June 30, 2017: (2i) - (1e) - (2b) - (2d) - (2f) - (2h)	\$ 3,649,947
<b>3. Development of Actuarial Value of Assets June 30, 2017</b>	
(a) 20 percent of June 30, 2013 difference: 20 percent of (2a)	\$ 0
(b) 20 percent of June 30, 2014 difference: 20 percent of (2c)	0
(c) 20 percent of June 30, 2015 difference: 20 percent of (2e)	0
(d) 20 percent of June 30, 2016 difference: 20 percent of (2g)	(1,107,482)
(e) 20 percent of June 30, 2017 difference: 20 percent of (2j)	729,989
(f) Actuarial value of assets June 30, 2017: (1e) + (3a) + (3b) + (3c) + (3d) + (3e):	\$ 66,419,271
<b>4. Unrecognized market value June 30, 2017: (2i) - (3f)</b>	<b>\$ (402,486)</b>
<b>5. Contribution Receivable</b>	<b>\$ 0</b>
<b>6. Actuarial Value of Assets (3f) + (5)</b>	<b>\$ 66,419,271</b>



## Schedule B: GASB 25 Disclosure Information

Note: Effective July 1, 2014, the Governmental Accounting Standards Board (GASB) replaced GASB Statement No. 25 with GASB No. 67, and effective July 1, 2015, GASB replaced Statement No. 27 with GASB No. 68. In response to the GASB No. 67 and GASB No. 68 requirements, Korn Ferry Hay Group delivered to the City under separate cover a set of exhibits dated September 29, 2017. Although GASB No. 25 and GASB No. 27 are no longer applicable, we continue to provide GASB No. 25 information here in Schedule B and GASB No. 27 information in the following Schedule C FOR INFORMATION PURPOSES ONLY.

### Schedule B.1 Actuarial Accounting Date

Date Used to Compute Benefit and Asset Values — July 1, 2017

### Schedule B.2. Method and Assumptions

All methods and assumptions used for Plan accounting are summarized in Schedule F.

<b>Schedule B.3</b>	
<b>Statement of Plan Net Assets</b>	
<b>1. Assets</b>	
a) Cash and Short Term Investments	\$ (1,474,584)
b) Receivables	0
c) Investments at Fair Value	
(1) Fixed Income	11,362,200
(2) Domestic Equities	40,301,190
(3) Foreign Equities	8,104,979
(4) Alternative Investments	7,770,760
d) Total Assets	\$ 66,064,545
<b>2. Liabilities</b>	
a) Payables for Investments Purchased and Other Payables	47,760
<b>3. Net Assets Held in Trust for Pension Benefits</b>	<b>\$ 66,016,785</b>



**Schedule B.4**  
**Schedule of Funding Progress**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets</b>	<b>Actuarial Accrued Liability (AAL)</b>	<b>Unfunded AAL</b>	<b>Funded Ratio</b>	<b>Covered Payroll</b>	<b>UAAL as % of Covered Payroll</b>
6/30/02	28,060,710	65,986,217	(37,925,507)	42.53%	3,775,389	(1004.55%)
6/30/03	29,217,703	67,277,252	(38,059,549)	43.43%	4,007,324	(949.75%)
6/30/04	33,645,290	58,014,568	(24,369,278)	57.99%	4,383,668	(555.91%)
6/30/05	36,209,737	61,626,704	(25,416,967)	58.76%	4,527,283	(561.42%)
6/30/06	39,118,117	62,635,048	(23,516,931)	62.45%	4,757,611	(494.30%)
6/30/07	44,288,895	70,038,232	(25,749,337)	63.24%	4,752,900	(541.76%)
6/30/08	41,952,553	68,177,847	(26,225,294)	61.53%	5,129,935	(511.22%)
6/30/09	37,852,800	73,443,988	(35,591,188)	51.54%	4,990,094	(713.24%)
6/30/10	42,240,992	74,866,848	(32,625,856)	56.42%	4,972,175	(656.17%)
6/30/11	43,693,248	76,570,775	(32,877,527)	57.06%	5,048,815	(651.19%)
6/30/12	43,320,088	82,684,359	(39,364,271)	52.39%	5,033,625	(782.03%)
6/30/13	48,411,954	82,838,152	(34,426,198)	58.44%	5,147,999	(668.73%)
6/30/14	57,507,986	85,862,792	(28,354,806)	66.98%	5,246,624	(540.44%)
6/30/15	60,203,022	92,926,296	(32,723,274)	64.79%	5,489,942	(596.06%)
6/30/16	62,994,728	97,940,088	(34,945,360)	64.32%	5,351,641	(652.98%)
6/30/17	66,419,271	102,420,432	(36,001,161)	64.85%	5,003,060	(719.58%)



<b>Schedule B.5 Schedule of Employer Contributions</b>			
<b>Actuarial Valuation Date</b>	<b>Annual Required Contribution</b>	<b>Actual Contribution</b>	<b>Percentage Contributed</b>
7/1/94	2,103,989	2,226,085	105.80%
7/1/95	2,279,943	2,322,898	101.88%
7/1/96	2,426,242	1,793,369	73.92%
7/1/97	2,547,554	2,759,907	108.34%
7/1/98	2,274,548	3,137,686	137.95%
7/1/99	2,094,752	2,510,675	119.86%
7/1/00	1,696,189	2,703,167	159.37%
7/1/01	1,985,197	2,273,062	114.50%
7/1/02	2,099,345	2,698,300	128.53%
7/1/03	3,247,875	3,247,875	100.00%
7/1/04	3,389,486	3,889,486	114.75%
7/1/05	2,440,649	2,440,649	100.00%
7/1/06	2,385,996	2,440,649	102.29%
7/1/07	2,272,177	2,272,049	100.00%
7/1/08	2,406,091	2,472,177	102.75%
7/1/09	2,470,822	2,670,822	108.09%
7/1/10	3,116,642	3,116,642	100.00%
7/1/11	2,899,579	2,899,579	100.00%
7/1/12	3,461,972	3,461,972	100.00%
7/1/13	3,954,174	3,954,174	100.00%
7/1/14	3,729,898	4,012,174	107.57%
7/1/15	3,327,981	4,012,174	120.56%
7/1/16	4,063,560	4,314,776	106.18%



## Schedule C: GASB 27 Disclosure Information

Effective July 1, 2015, GASB No. 27 was replaced by GASB No. 68. Therefore, this schedule is presented FOR INFORMATION PURPOSES ONLY.

Schedule C - Development of the Net Pension Obligation (Asset)											
Fiscal Year Ending	Val. Interest Rate	Amort. Years	Amort. Factor	NPO at Beginning of Year	Annual Required Contribution	Interest on NPO	Adjustment to NPO	Annual Pension Cost	Actual Contribution	Increase in NPO	NPO at End of Year
6/30/94	8.00%	30	22.7490	(885,276)	1,823,577	(70,822)	38,015	1,791,670	2,136,173	(344,503)	(1,229,779)
6/30/95	8.25%	30	18.4393	(1,229,779)	2,103,989	(101,457)	66,693	2,069,225	2,226,085	(156,860)	(1,386,639)
6/30/96	8.25%	30	18.4393	(1,386,639)	2,279,943	(114,398)	75,200	2,240,745	2,322,898	(82,153)	(1,468,792)
6/30/97	8.25%	30	18.4393	(1,468,792)	2,426,242	(121,175)	79,656	2,384,722	1,793,369	591,353	(877,439)
6/30/98	8.25%	30	18.4393	(877,439)	2,547,554	(72,389)	47,585	2,522,750	2,759,907	(237,157)	(1,114,596)
6/30/99	8.25%	30	18.4393	(1,114,596)	2,274,548	(91,954)	60,447	2,243,040	3,137,686	(894,646)	(2,009,242)
6/30/00	8.25%	30	18.4393	(2,009,242)	2,094,752	(165,762)	108,965	2,037,954	2,510,675	(472,721)	(2,481,963)
6/30/01	8.25%	30	20.1557	(2,481,963)	1,696,189	(204,762)	123,140	1,614,567	2,703,167	(1,088,600)	(3,570,563)
6/30/02	8.25%	30	20.1557	(3,570,563)	1,985,197	(294,571)	177,149	1,867,775	2,273,062	(405,287)	(3,975,850)
6/30/03	8.25%	30	20.1557	(3,975,850)	2,099,345	(328,008)	197,257	1,968,594	2,698,300	(729,706)	(4,705,556)
6/30/04	8.25%	29	19.6866	(4,705,556)	3,247,875	(388,208)	239,023	3,098,690	3,247,875	(149,185)	(4,854,741)
6/30/05	8.25%	28	19.2064	(4,854,741)	3,389,486	(400,516)	252,767	3,241,737	3,889,486	(647,749)	(5,502,490)
6/30/06	8.25%	27	15.8723	(5,502,490)	2,440,649	(453,955)	346,673	2,333,367	2,440,649	(107,282)	(5,609,772)
6/30/07	8.25%	26	15.5296	(5,609,772)	2,385,996	(462,806)	361,231	2,284,421	2,440,649	(156,228)	(5,766,000)
6/30/08	8.25%	25	14.8848	(5,766,000)	2,272,177	(475,695)	387,375	2,183,857	2,272,049	(88,192)	(5,854,192)
6/30/09	8.25%	24	14.5315	(5,854,192)	2,406,091	(482,971)	402,862	2,325,982	2,472,177	(146,195)	(6,000,387)
6/30/10	8.25%	23	14.1638	(6,000,387)	2,470,822	(495,032)	423,642	2,399,432	2,670,822	(271,390)	(6,271,777)
6/30/11	7.50%	22	14.1447	(6,271,777)	3,116,642	(470,383)	443,401	3,089,660	3,116,642	(26,982)	(6,298,759)
6/30/12	7.50%	21	13.7252	(6,298,759)	2,899,579	(472,407)	458,919	2,886,091	2,899,579	(13,488)	(6,312,247)
6/30/13	7.50%	20	13.2894	(6,312,247)	3,461,972	(473,419)	474,984	3,463,537	3,461,972	1,565	(6,310,682)
6/30/14	7.50%	19	12.8369	(6,310,682)	3,954,174	(473,301)	491,605	3,972,478	3,954,174	18,304	(6,292,378)
6/30/15	7.50%	18	11.8170	(6,292,378)	3,729,898	(471,928)	532,485	3,790,455	4,012,174	(221,719)	(6,514,097)
6/30/16	7.25%	17	11.6044	(6,514,097)	3,327,981	(472,272)	561,347	3,417,056	4,012,174	(595,118)	(7,109,215)
6/30/17	7.25%	16	11.1394	(7,109,215)	4,063,560	(515,418)	638,204	4,186,346	4,314,776	(128,430)	(7,237,645)

*Note: Amortization factors used for periods prior to FY 2001 did not reflect future longevity or promotion pay increases.*



## Schedule D: Forecast of Plan Contributions and Benefit Payments

The following table discloses the estimated City contributions and benefits to be paid from the Plan over the next twenty years, under the current set of actuarial assumptions. Effective July 1, 2014 new police hires are enrolled in the State of Rhode Island Municipal Employees' Retirement System. Since there will be no new entrants to this group, this projection no longer assumes new entrants. This is why the Normal Cost and Expected Employee Contributions are now decreasing in each of the projection years.

Schedule D Forecast of Plan Contributions and Benefit Payments						
FY Ending 6/30	Normal Cost	Amortization of Unfunded AL	Estimated Employee Contributions	Annual Required Contribution	Benefit Payments	Funded Percent
2019	1,525,653	3,547,818	425,899	4,647,573	5,845,689	64.5%
2020	1,483,716	3,679,171	415,345	4,747,542	6,089,879	66.4%
2021	1,469,443	3,813,116	411,567	4,870,992	6,338,304	68.3%
2022	1,419,621	3,949,590	398,384	4,970,827	6,539,755	70.4%
2023	1,413,510	3,948,370	396,891	4,964,989	6,795,715	72.5%
2024	1,359,869	4,062,479	382,496	5,039,852	6,961,794	74.6%
2025	1,361,252	4,179,019	383,038	5,157,234	7,200,552	76.9%
2026	1,324,395	4,297,352	372,682	5,249,065	7,408,489	79.2%
2027	1,315,304	4,417,151	370,256	5,362,199	7,629,584	81.7%
2028	1,285,421	4,537,313	362,227	5,460,507	7,946,728	84.3%
2029	1,219,515	4,656,101	343,817	5,531,799	8,227,071	87.1%
2030	1,161,274	4,770,486	327,513	5,604,247	8,515,328	90.1%
2031	1,093,899	4,871,937	308,073	5,657,762	8,710,398	93.2%
2032	1,072,562	4,927,814	302,152	5,698,224	8,957,862	96.5%
2033	1,013,352	-	286,352	726,999	9,191,946	100.1%
2034	966,755	-	273,222	693,533	9,369,018	100.1%
2035	931,586	-	263,349	668,237	9,752,756	100.2%
2036	799,300	-	224,943	574,357	9,913,262	100.3%
2037	759,270	-	213,592	545,678	10,065,490	100.4%
2038	715,099	-	201,370	513,729	10,297,290	100.5%
2039	634,008	-	178,583	455,426	10,455,554	100.6%



## Schedule E: Profiles of Population

### Schedule E.1. Number of Active Participants by Age and Duration

Active Participants (Male)								
Age Group	Duration							Total
	0- 4	5-9	10-14	15-19	20-24	25-29	30+	
0- 19	0	0	0	0	0	0	0	0
20- 24	0	0	0	0	0	0	0	0
25- 29	1	4	0	0	0	0	0	5
30- 34	2	7	2	0	0	0	0	11
35- 39	2	2	6	1	0	0	0	11
40- 44	0	2	3	8	0	0	0	13
45- 49	0	0	0	5	6	0	0	11
50- 54	0	0	0	1	1	4	0	6
55- 59	0	0	0	0	0	0	1	1
60- 64	0	0	0	0	0	0	1	1
65+	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>5</b>	<b>15</b>	<b>11</b>	<b>15</b>	<b>7</b>	<b>4</b>	<b>2</b>	<b>59</b>
<b>AVG AGE</b>		<b>40.53</b>		<b>AVG DUR</b>			<b>13.88</b>	

Active Participants (Female)								
Age Group	Duration							Total
	0- 4	5-9	10-14	15-19	20-24	25-29	30+	
0- 19	0	0	0	0	0	0	0	0
20- 24	0	0	0	0	0	0	0	0
25- 29	0	1	0	0	0	0	0	1
30- 34	1	0	0	0	0	0	0	1
35- 39	0	0	0	0	0	0	0	0
40- 44	0	0	0	0	0	0	0	0
45- 49	0	0	0	1	1	0	0	2
50- 54	0	0	0	0	0	0	0	0
55- 59	0	0	1	0	0	0	0	1
60- 64	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	0	0
<b>TOTAL:</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>5</b>
<b>AVG AGE</b>		<b>42.20</b>		<b>AVG DUR</b>			<b>11.80</b>	



Active Participants (Total)								
Age Group	Duration							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	1	5	0	0	0	0	0	6
30-34	3	7	2	0	0	0	0	12
35-39	2	2	6	1	0	0	0	11
40-44	0	2	3	8	0	0	0	13
45-49	0	0	0	6	7	0	0	13
50-54	0	0	0	1	1	4	0	6
55-59	0	0	1	0	0	0	1	2
60-64	0	0	0	0	0	0	1	1
65+	0	0	0	0	0	0	0	0
<b>TOTAL:</b>	<b>6</b>	<b>16</b>	<b>12</b>	<b>16</b>	<b>8</b>	<b>4</b>	<b>2</b>	<b>64</b>
	<b>AVG AGE</b>		<b>40.66</b>		<b>AVG DUR</b>		<b>13.72</b>	

**Schedule E. 2. Number of Inactive Participants by Age and Annual Pension**

Inactive Participants (Retirees)						
Age Group	Male		Female		Total	
	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
40-44	0	0	0	0	0	0
45-49	3	127,732	1	36,676	4	164,408
50-54	9	514,688	1	46,287	10	560,975
55-59	12	676,005	1	57,655	13	733,660
60-64	19	1,039,002	0	0	19	1,039,002
65-69	14	772,780	0	0	14	772,780
70-74	15	847,933	0	0	15	847,933
75-79	9	406,348	0	0	9	406,348
80-84	3	174,531	0	0	3	174,531
85-89	0	0	0	0	0	0
90-94	3	161,402	0	0	3	161,402
95-99	0	0	0	0	0	0
100-104	0	0	0	0	0	0
105-109	0	0	0	0	0	0
110-114	0	0	0	0	0	0
115-119	0	0	0	0	0	0
120+	0	0	0	0	0	0
<b>TOTAL</b>	<b>87</b>	<b>4,720,421</b>	<b>3</b>	<b>140,618</b>	<b>90</b>	<b>4,861,039</b>
	<b>AVG AGE: 65.5</b>		<b>AVG AGE: 51.3</b>		<b>AVG AGE: 65.1</b>	
	<b>AVG PENSION: 54,258</b>		<b>AVG PENSION: 46,873</b>		<b>AVG PENSION: 54,012</b>	



<b>Inactive Participants (Disabled)</b>						
<b>Age Group</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>	
	<b>Number</b>	<b>Annual Pension</b>	<b>Number</b>	<b>Annual Pension</b>	<b>Number</b>	<b>Annual Pension</b>
20- 24	0	0	0	0	0	0
25- 29	0	0	0	0	0	0
30- 34	0	0	0	0	0	0
35- 39	0	0	0	0	0	0
40- 44	0	0	0	0	0	0
45- 49	2	98,034	1	50,629	3	148,663
50- 54	3	133,950	0	0	3	133,950
55- 59	0	0	0	0	0	0
60- 64	2	45,343	0	0	2	45,343
65- 69	1	20,622	0	0	1	20,622
70- 74	0	0	1	47,085	1	47,085
75- 79	0	0	0	0	0	0
80- 84	0	0	0	0	0	0
85- 89	0	0	0	0	0	0
90- 94	0	0	0	0	0	0
95- 99	0	0	0	0	0	0
100-104	0	0	0	0	0	0
105-109	0	0	0	0	0	0
110-114	0	0	0	0	0	0
115-119	0	0	0	0	0	0
120+	0	0	0	0	0	0
<b>TOTAL</b>	<b>8</b>	<b>297,949</b>	<b>2</b>	<b>97,714</b>	<b>10</b>	<b>395,663</b>
	<b>AVG AGE:</b>	<b>55.1</b>	<b>AVG AGE:</b>	<b>58.5</b>	<b>AVG AGE:</b>	<b>55.8</b>
	<b>AVG PENSION:</b>	<b>37,244</b>	<b>AVG PENSION:</b>	<b>48,857</b>	<b>AVG PENSION:</b>	<b>39,566</b>



<b>Inactive Participants (Beneficiaries)</b>						
<b>Age Group</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>	
	<b>Number</b>	<b>Annual Pension</b>	<b>Number</b>	<b>Annual Pension</b>	<b>Number</b>	<b>Annual Pension</b>
15-19	0	0	0	0	0	0
20- 24	0	0	0	0	0	0
25- 29	0	0	0	0	0	0
30- 34	0	0	0	0	0	0
35- 39	0	0	0	0	0	0
40- 44	0	0	0	0	0	0
45- 49	0	0	1	12,581	1	12,581
50- 54	0	0	1	10,425	1	10,425
55- 59	0	0	0	0	0	0
60- 64	0	0	3	57,532	3	57,532
65- 69	0	0	4	99,001	4	99,001
70- 74	0	0	5	94,418	5	94,418
75- 79	0	0	6	126,568	6	126,568
80- 84	0	0	2	37,912	2	37,912
85- 89	0	0	4	36,049	4	36,049
90- 94	0	0	5	71,199	5	71,199
95- 99	0	0	0	0	0	0
100-104	0	0	0	0	0	0
105-109	0	0	0	0	0	0
110-114	0	0	0	0	0	0
115-119	0	0	0	0	0	0
120+	0	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>545,685</b>	<b>31</b>	<b>545,685</b>
	<b>AVG AGE:</b>	<b>0.0</b>	<b>AVG AGE:</b>	<b>75.9</b>	<b>AVG AGE:</b>	<b>75.9</b>
	<b>AVG PENSION:</b>	<b>0</b>	<b>AVG PENSION:</b>	<b>17,603</b>	<b>AVG PENSION:</b>	<b>17,603</b>



<b>Inactive Participants (Vested Terms)</b>						
<b>Age Group</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>	
	<b>Number</b>	<b>Annual Pension</b>	<b>Number</b>	<b>Annual Pension</b>	<b>Number</b>	<b>Annual Pension</b>
20- 24	0	0	0	0	0	0
25- 29	0	0	0	0	0	0
30- 34	0	0	0	0	0	0
35- 39	0	0	0	0	0	0
40- 44	0	0	0	0	0	0
45- 49	0	0	0	0	0	0
50- 54	1	36,000	0	0	1	36,000
55- 59	0	0	0	0	0	0
60- 64	0	0	0	0	0	0
65- 69	0	0	0	0	0	0
70- 74	0	0	0	0	0	0
75- 79	0	0	0	0	0	0
80- 84	0	0	0	0	0	0
85- 89	0	0	0	0	0	0
90- 94	0	0	0	0	0	0
95- 99	0	0	0	0	0	0
100-104	0	0	0	0	0	0
105-109	0	0	0	0	0	0
110-114	0	0	0	0	0	0
115-119	0	0	0	0	0	0
120+	0	0	0	0	0	0
<b>TOTAL</b>	<b>1</b>	<b>36,000</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>36,000</b>
	<b>AVG AGE:</b>	<b>51.0</b>	<b>AVG AGE:</b>	<b>0.0</b>	<b>AVG AGE:</b>	<b>51.0</b>
	<b>AVG PENSION:</b>	<b>36,000</b>	<b>AVG PENSION:</b>	<b>0</b>	<b>AVG PENSION:</b>	<b>36,000</b>



## Schedule F: Actuarial Methods and Assumptions

### Actuarial Cost Method:

Individual Entry Age Normal Actuarial Cost Method - Under this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit. The normal cost is the portion of the actuarial present value allocated to the valuation year. For inactive members, the actuarial accrued liability is equal to the present value of benefits. Inactive members do not have a normal cost. The portion of this actuarial present value not provided for at the valuation date by the sum of the actuarial value of the assets and actuarial present value of future normal costs is the unfunded actuarial accrued liability. The unfunded actuarial accrued liability represents the excess of the total actuarial accrued liability over the valuation assets.

### Asset Valuation Method:

Funding: 5-year smoothed market value;  
Accounting (GASB Nos. 67 & 68): market value

### Actuarial Assumptions:

1. *Interest* 7.25% per year, net of investment expenses, became effective June 30, 2016.
2. *Salary Increases* 2.75% per year through July 1, 2022. Thereafter, 3.00% per year plus longevity increases of 3.00% after seventh year of employment and 0.50% for each year of employment thereafter through the thirty-first year of employment. No longevity increases are assumed after the thirty-first year of employment.
3. *Cost of Living Increases* Tied to the general wage increase which is usually assumed to be 3.00% per year. Benefits payable to service related disability retirements on or after July 1, 2014 are assumed to increase 2.75% per year.
4. *Mortality*
  - a. *Healthy Members* RP-2000 Combined Healthy Mortality Table, applied on a fully generational basis using Mortality Projection Scale AA. This table contains sufficient margin for improvement in life expectancy.
  - b. *Disabled Members* The 1985 Wyatt Pension Disability Table (unisex rates)
5. *Disability* Rates of disability are based on an employee's age. Selected ages are listed below. 90% of disabilities are assumed to be service related.

Attained Age	Probability of Disability
25	0.17%
35	0.29%
45	0.72%
55	1.21%



6. *Withdrawal*

Rates of withdrawal are based on an employee's length of service, as follows:

<b>Years of Service</b>	<b>Probability of Withdrawal 7/1/17 Valuation</b>	<b>Probability of Withdrawal Prior Valuation</b>
<1	3.00%	4.50%
1	2.25%	3.38%
2	2.00%	3.00%
3	1.75%	2.63%
4	1.50%	2.25%
5	1.25%	1.88%
6	1.00%	1.50%
7	0.75%	1.13%
8	0.50%	0.75%
9	0.25%	0.38%
10+	0.00%	0.00%

7. *Retirement*

Rates of retirement are based on an employee's length of service, as follows:

<b>Years of Service</b>	<b>Probability of Retirement 7/1/17 Valuation</b>	<b>Probability of Retirement Prior Valuation</b>
20	10%	10%
21	2%	2%
22	2%	2%
23	2%	2%
24	2%	2%
25	50%	40%
26	10%	10%
27	10%	10%
28	10%	10%
29	10%	10%
30	50%	40%
31	20%	20%
32	20%	20%
33	20%	20%
34	20%	20%
35+	100%	100%

8. *Administrative Expenses*

Assumed to be paid by the Plan Sponsor outside the trust.

9. *Benefit Compensation Limits*

Benefit limits under Section 415 and compensation limits under Section 401(a)(17) of the Internal Revenue Code are assumed to have no impact on benefits earned under this Plan.

10. *Marriage/Dependents*

75% of active police are assumed to be married. For all participants, wives are assumed to be three years younger than their husbands. For the purposes of valuing the death benefit, unmarried members are assumed to have no dependent children at death.

11. *Valuation Date*

July 1, 2017.



## Schedule G: Summary of Plan Provisions as of July 1, 2017

### 1. Effective Date

- a. *Most recent amendment* July 1, 2014

### 2. Eligibility

All members of the police department who contribute to the pension fund and who were hired before July 1, 2014 (or enrolled in the Police Academy as of September, 2014). All other police hires on or after July 1, 2014 will be covered by the State of Rhode Island Municipal Employees' Retirement System.

### 3. Retirement

- a. *Eligibility*

Members who have completed 20 years of service may retire.

- b. *Benefit Formula*

The annual benefit at retirement is equal to the percentage of final annual salary specified in the table below, plus \$100 per year for each year of service over 25 (maximum \$1,000). For pension purposes, annual salary includes regular and longevity pay.

Years of Service	Benefit as a Percentage of Final Annual Salary
20	50.0%
21	52.5%
22	55.0%
23	57.5%
24	60.0%
25	65.0%
26	66.0%
27	67.0%
28	68.0%
29	69.0%
30+	70.0%

Note: The benefit levels shown above payable at years of service 25 through 29 were increased as a result of negotiated benefit formula changes that became effective July 1, 2014.

- c. *Commencement Date*

Retirement benefits commence as of the first payroll period after retirement

- d. *Form of Payment*

The annual benefit calculated in accordance with the formula in (b) above is payable monthly for the remainder of the retired member's life, with 67.5% of the member's benefit payable for the lifetime of the member's surviving spouse.

### 4. Vested Termination

- a. *Eligibility*

Upon termination of employment after 10 years of service, a member is eligible for a benefit deferred to retirement age.

- b. *Benefit Formula*

2.5% of final annual salary multiplied by full years of service at termination.



- c. *Commencement Date* 20th anniversary of employment.
- d. *Form of Payment* Same as retirement.

## 5. Disability Retirement

- a. *Eligibility*
  - i. Non-Service Related No benefit prior to completion of 7 years of service. A member who is disabled with between 7 and 20 years of service is eligible to receive disability retirement benefits.
  - ii. Service Related Retirement because of a job-related mental or physical incapacity.
- b. *Benefit Formula*
  - i. Non-Service Related 50% of final annual salary.
  - ii. Service Related 66-2/3% of final annual salary.
- c. *Commencement Date* Benefits commence as of first payroll period after disability.
- d. *Form of Payment* Same as retirement.

## 6. Non-Vested Termination of Employment

A member who leaves employment prior to completing 10 years of service will receive a lump sum payment of accumulated contributions.

## 7. Death Before Retirement – Survivor Annuity Benefits

- a. *Eligibility* Death while actively employed.
- b. *Benefit Formula* Surviving spouse (or, if none, dependent children) receives benefit of 67.5% of final annual salary, reduced pro rata if the deceased member had less than 20 years of service.
- c. *Commencement Date* Benefits commence as of the first payroll period after death.
- d. *Form of Payment* Monthly life annuity.

## 8. Retiree Cost of Living Increase

For retirements before July 1, 2014: Pensions for retirees (but not disabled retirees or beneficiaries) are indexed to the negotiated pay increases for active police. Terminated vested members receive 3% annual increases after benefit commencement.

For retirements on or after July 1, 2014: Pensions for retirees with at least 20 years of service are indexed to the negotiated pay increases for active police. For retirees with 20 to 25 years of service, the indexing begins when the retiree would have attained 25 years of service. Retirements with less than 20 years of service do not get indexed except for job related disability retirements. Job related disability retirement benefits are indexed using the Bureau of Labor Statistics CPI for Northeast Urban Wage Earners, but will not exceed 3.00% nor be lower than 1.00% per year.

## 9. Employee Contributions 8% of salary.



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